

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-5 are presently active in this case. The present Amendment amends Claims 1-2; and adds Claims 3-5.

The outstanding Office Action rejected Claims 1 and 2 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Czaplicki (U.S. Patent No. 5,028,474). Claim 2 was rejected under 35 U.S.C. § 103(a) as unpatentable over Czaplicki.

In response to the rejection under 35 U.S.C. § 112, second paragraph, Claims 1-2 are amended to correct the noted informalities, and to comply better with U.S. claim drafting practice. In view of the amended claims, it is believed that all pending claims are definite and no further rejection on that basis is anticipated. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

In order to vary the scope of protection recited in the claims, new Claims 3-5 are added. New Claims 3-5 find non-limiting support in the disclosure as originally filed, for example in Claims 1-2 and at page 4, lines 7-27 with corresponding Figs. 1-5. Therefore, the changes to the claims are not believed to raise a question of new matter.¹

In response to the rejections of Claims 1-2 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a), and in light of the present Amendment, Applicant respectfully requests reconsideration of these rejections and traverses the rejections, as discussed next.

¹ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

Briefly recapitulating, Applicant's invention, as recited in amended Claim 1, relates to a method for producing *a curvilinear folded structure* including several steps. A sheet blank is bent along bending lines to form a 3-D relief structure. The 3-D relief structure is *folded until complete joining of sides of the 3-D relief structure* to obtain a folded structure. See for example, Fig. 4. Shear stresses are applied to the folded structure so as to *form a folded arched-shaped structure*. See for example, Fig. 5. The folded arched-shaped structure is thermally treated thereby relieving inner stresses in the folded arched-shaped structure. *After the step of thermally treating, the folded arched-shaped structure is stretched so as to produce the curvilinear folded structure having an overall curvature radius.*

Turning now to the applied prior art, the Czaplicki patent discloses a 3-D structure including an alternating sequence of ridges and valleys, creating spaced rows of adjacent inclined rectangular-shaped facets connected by intermediate rows of adjoining parallelogram-shaped facets. However, the Czaplicki patent fails to teach the claimed method. In particular, the Czaplicki patent fails to teach a method of producing a *curvilinear* folded structure *having an overall curvature radius*. As can be seen in Czaplicki's Fig. 8, the Czaplicki structure is not curvilinear and does not have an overall curvature radius. Instead, the Czaplicki structure is flat. Further, the Czaplicki patent states:

FIGS. 7 and 8 further illustrate the *final* layout of the FIG. 6 embodiment of folded core of sheet material after completion to the extent desired of a progressive forming operation, and after enclosure between *opposing parallel face* sheets 26 and 28, to form a sandwich panel-type structure 30.²

Therefore, the Czaplicki structure is flat and fits with parallel flat faces. Thus, the Czaplicki patent fails to teach the claimed method. More specifically, the Czaplicki patent fails to teach the claimed steps of applying shear stresses to the folded structure so as to form a folded *arched-shaped* structure, thermally treating the folded arched-shaped structure, and

² The Czaplicki patent at column 7, lines 43-48 (emphasis added).

after the step of thermally treating, *stretching the folded arched-shaped structure so as to produce the curvilinear folded structure having an overall curvature radius*. Therefore, the Czaplicki patent fails to disclose every feature recited in Applicant's claims, so that Claims 1-5 are not anticipated by the Czaplicki patent. Accordingly, Applicant respectfully traverses, and requests reconsideration of, the 35 U.S.C. § 102 rejection based on the Czaplicki patent.³

Furthermore, there is no apparent reason to modify the Czaplicki method so as to arrive at Applicant's claimed inventions. The position that the Czaplicki method *could* be modified to arrive at the claimed inventions would be insufficient to establish a prima facie case of obviousness. Furthermore, it is not clear how such modification could be achieved without a substantial reconstruction or redesign of the Czaplicki method and structure.⁴ Accordingly, Applicant respectfully traverses, and requests reconsideration of, the 35 U.S.C. § 103 rejection based on the Czaplicki patent.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-5 is earnestly solicited.

³ See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

⁴ See In re Ratti, 270 F.2d 810, 813, 123 USPQ 349, 352 (reversing an obviousness rejection where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.")

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Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "P. J. Signore", written over a horizontal line.

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